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ABSTRACT

This study investigated the relationship between the prior degree of contact of student teachers with children and the anxiety level of the student teachers before and during actual contact with children in the classroom. Subjects of the study were student teachers beginning classroom teaching experiences in the spring semester before graduation. All of the classrooms were judged of equal difficulty in terms of academic and behavior management problems. Results of anxiety tests administered over a six week period indicated that the anxiety level tended to be higher for the group with low previous contact with children. However, this anxiety seemed to diminish as the student teacher continued to interact with pupils. Results of the study having implications for teacher education are discussed. (JD)

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A Study of the Relationship Between the Amount of Student Teacher's Prior Contact with Children and Anxiety Level During Student Teaching

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A Study of the Relationship Between the Amount of Student Teacher's Prior Contact with Children and Anxiety Level During Student Teaching

This study investigated the relationship between the prior degree of contact of student teachers with children, and the anxiety level of the student teachers before and during actual contact with children in the classroom.

Numerous assumptions have been made and are being made relative to the need for greater amounts of field experiences for prospective teachers during their training experiences. The findings of this study shed some light on an unexplored area in the psychology of anxiety and the initial confrontation of student teachers and children in the classroom.

Problem

The problem of this investigation was to determine the nature of the relationships between student teachers' prior degree of contact with children and their anxiety level immediately before they begin actual teaching in the classroom. This investigation was made with due consideration of the assumption and limitation listed later in this summary.

Purpose of the Study

The purpose of the study was to seek answers to the following questions:

1. Do the student teachers' childhood experiences influence their success or failure in interacting with children in the classroom?

Does a heightened state of anxiety block the student teachers' ability to empathize with and instruct the student?

2. Are student teachers like child-care workers in that they are more successful in working with the children with whom they are able to identify? Do successful student teachers have positive feelings about their childhood selves, as did the "best-liked" teachers?

3. Does the expressed anxiety of student teachers achieve its peak at the threshold of confrontation? Does physiologic anxiety increase throughout the confrontation?

4. To what extent is anxiety exchanged between the child in the classroom and the student teacher?

5. Are student teachers a highly anxious group?

Research Hypothesis

Specifically this study proposes to test the following research hypothesis:

The group having high previous contact with children has an anxiety score which is significantly lower than the group having low previous contact with children, over the three readings, with adjustment from the baseline reading.

Assumptions

The following assumptions were made throughout the study:

1. Anxiety is produced by situations which an individual finds stressful.

2. The Palmar Sweat Print readings are measures of the individual's physiologic anxiety at the moment they were read.

3. Individuals responded to the Contact with Children Scale in an honest and candid fashion.

4. The classes in which the students were teaching were normally distributed in terms of behavior and attitudes toward learning.

Research Design

The study was classified as a status study (Baker and Schutz, 1972) in that the criterion variables, anxiety level recorded at intervals across the six-week period, were analyzed in view of a nonmanipulable variate, degree of prior contact with children. Degree of prior contact with children represented a naturalistic varibale to which subjects could not be assigned on any random basis.

The study included one covariable, a baseline reading of anxiety level in an unaroused state. Students in the sample were randomly assigned to classrooms. These classrooms were judged to be equal in terms of behavior and learning problems. The study was conducted over a six-week period, and during that time the student teacher had four anxiety-level measurements taken. The first was a baseline reading taken in an anxiety-free situation removed from the classroom. The remaining three were taken in the school immediately before the student teacher began his actual teaching. The reaearch design is depicted as follows:

$$\begin{array}{ccccccc} O_{01} & & C_{1} & & O_{11} & O_{21} & O_{31} \\ \hline O_{02} & & C_{2} & & O_{12} & O_{22} & O_{32} \end{array}$$

where:

O_1 represents the baseline anxiety-level reading for the high prior contact with children group.

O_2 represents the baseline anxiety-level reading for low prior contact with children group.

O_{11}, O_{21}, O_{31} represents the remaining three anxiety-level readings for the high prior contact with children group.

O_{12}, O_{22}, O_{32} represents the remaining three anxiety-levels readings for the low prior contact with children group.

C_1 represents the high prior contact with children group.

C_2 represents the low prior contact with children group. The broken line (---) represents the fact that the student teachers were not randomly assigned to groups.

The Criterion-Group Design (Tuckman 1972) was employed to test the relationship between degree of previous contact with children and physiologic anxiety of the student-teacher prior to his/her first classroom contact with children.

Population and Sample

The population for the study was the Spring class, 1979, of student teachers in the Division of Education, Southern University in New Orleans. The students began their classroom teaching experiences at the beginning of the Spring semester before graduation.

The sample was selected on the basis of scores on the Contact with Children Scale. The 10 highest and the 10 lowest scores, those having reported the most and the least amount of contact with children, comprised the study sample.

The sample subjects were randomly assigned student teaching assignments. The pupils in the classroom were judged of equal difficulty in the terms of academic and behavior-management problems. The study was conducted over a six-week period.

Four separate anxiety level measurements were taken using the Palmar Sweat Print Test on the first three fingers of the working hand. The first was a baseline reading taken in an anxiety free setting, while the remaining three were taken in the classroom immediately before the students began teaching. See Table I.

TABLE 1

CLASSIFICATION OF READINGS

BASELINE READING:	NONSTRESS, UNIVERSITY SETTING, PRIOR TO CONTACT WITH STUDENTS
1 READING:	IMMEDIATELY PRECEDING FIRST TEACHING ASSIGNMENT (CONTACT) WITH STUDENTS
2 READING:	TWO WEEKS AFTER 1 READING
3 READING:	TWO WEEKS AFTER 2 READING

The prints from the Palmar Sweat Print Test were read on a densitometer. The darker the print, the higher the level of anxiety and the higher the densitometer reading. See Table 2.

TABLE 2

MEANS FOR THE HIGH-CONTACT AND LOW-CONTACT GROUPS ACROSS READINGS

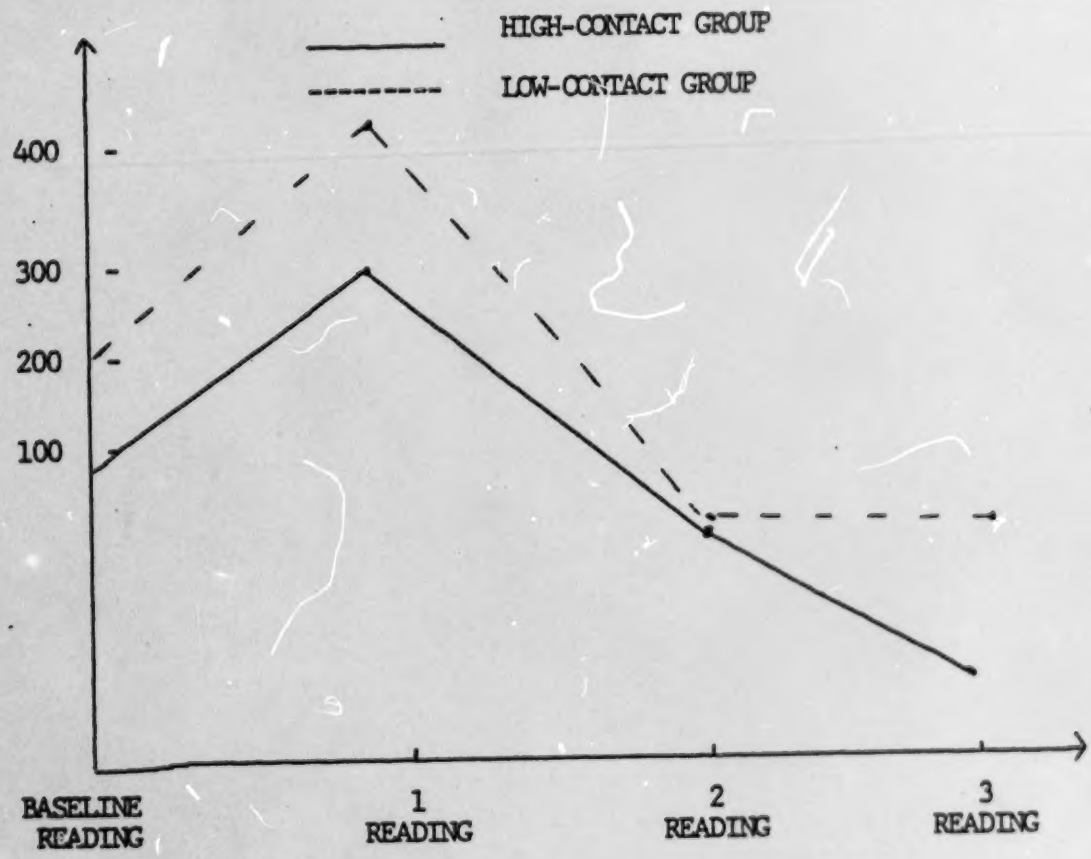
READING:	GROUP			
	HIGH-CONTACT		LOW-CONTACT	
	N	$\bar{X}$	N	$\bar{X}$
BASELINE	22	64.89	22	162.67
NO. 1	22	203.50	22	406.27
NO. 2	21	141.28	22	150.00
NO. 3	21	126.28	22	176.80

Figure 1 compares the Palmar Sweat Print means for the high contact and low contact groups.

FIGURE 1

PALMAR SWEAT PRINT READING

PROFILE OF MEANS



*F=2.83

P=.057

Methods of Analyzing Data

The Criterion - Group Design (Tuckman, 1972) was employed to list the relationship between the degree of previous contact with children and physiologic anxiety of the student teacher prior to his/her first classroom contact with children. The standard multivariate analysis of covariance (MANCOVA) was run with readings 1, 2 and 3 as dependant variables. The model also consisted of a main effect associated with which group the student was from (i.e., the high scoring group on the C.C.S. or the low scoring group), the baseline (zero) reading as a covariate, and a main effect associated with each finger the readings was taken on.

Description of Measurements

The Contact with Children Scale (CCS) is designed to assess the extent of an adult's previous (from his own childhood to present) contact with children. Areas of contact explored by the scale include the following: (1) family, (2) neighborhood, (3) church, (4) school, (5) scouting/camping, (6) sports, (7) youth groups - non-church, and (8) vocational.

The various items are sequenced chronologically, that is, they are written so that the respondent's thoughts progress from past to present without interruption. The last two items allow the respondent to make overall assessments of the quantity and quality of his/her previous contacts with children.

This scale was used to measure the amount of prior contact that student teachers had had with children and to identify the 10 students with the greatest and the 10 students with the least amount of prior contact with children. These 20 students comprised the sample for the study.

Student anxiety level was measured by the Palmar Sweat Print Test (PSPT). This test is a clinically accepted measure of physiologic anxiety level with strong evidence of realiability and validity (Lore, 1966). Test-retest reliability coefficients range from .54 to .80 for four fingers over a one-day interval. Over a 15-day interval, the realiability coefficients ranged from .56 to .60. Inter-finger correlations range from .72 to .83. Other researchers (Wenger and Gilchrist, 1948. Haywood and Shoemaker, 1963; Brutten, 1959) reported somewhat higher coefficients.

Findings

The research hypothesis stated in the null form was: there was no overall effect of student group classification.

The findings did reject this hypothesis with a significance of $P < .057$ (Table 1, Figure 1).

Conclusions

The results of the study suggested that anxiety level tended to be higher for the low-contact group, particularly at the point immediately before initial teaching contact with pupils. This difference, however, was not evident in Readings 2 and 3. One explanation may be that although low-contact student teachers have an initial anxiety that is significantly higher than the high-contact student teachers, this anxiety seems to diminish as the student teacher interacts with the pupils in the classroom. Another explanation may be that the low-contact student teachers are not aware of their anxieties until they are faced with the prospect of interaction with student the first time. Also, subsequent interaction with the pupils may have been in low-stress activities such as supervising group work, monitoring individual projects, and checking papers. This might

account for the diminished anxiety of the low-contact groups.

Implications for Teacher Education

The results of the study seem to have several implications for teacher education.

The study does:

1. provide support for early contact with children as an anxiety-reducing variable for student teachers;
2. provide support for continued and intensified contact with children throughout the student's program;
3. provide data for the development of a more individualized student teaching experience; and
4. provide a basis for stress management programs for student teachers.

This study does not:

1. address the possible realtionship of anxiety level and teaching effectiveness;
2. control the possibility of other background and personality factors that may be related to contact with children; nor
3. examine anxiety level and classroom management problems which may aggravate an already stressful situation.

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